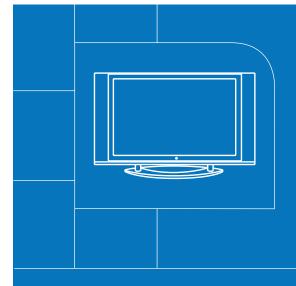
USER'S MANUAL



30" HDTV-Ready LCD TV model LTV-30w2



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PRODUCT SAFETY INSTRUCTIONS

Follow and obey all warnings and instructions marked on the LCD TV. For your safety, please read all the safety and operating instructions before you operate the LCD TV. Keep this user's manual for future reference.

Overloading

Do not overload wall outlets, extension cords, or power strips. This can result in fire or electronic shock.

Power Cord Protection

Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them. Periodically inspect the cords and each end of the cords for damage. The LCD TV shall be installed near the wall socket outlet and the plug on power cord shall be readily accessible.

Ventilation

Slots and openings on the cabinet are provided for ventilation purposes. To ensure reliable operation of the LCD TV and to protect it from overheating, these openings must not be blocked or covered.

- Do not block the openings by placing the LCD TV on a bed, sofa, rug or other similar surface.
- Do not place the LCD TV in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instruction have been adhered to.

Other Notices

- Avoid exposing the LCD TV to direct sunlight or high temperatures.
- Avoid exposing the LCD TV to moisture or high humidity
- Do not attempt repairs yourself. Your warranty does not cover repairs or attempted repairs by anyone not authorized by the manufacturer
- If your LCD TV will not be used for a long period of time, unplug the LCD TV and remove the batteries from the remote control

Precautions

- Avoid touching the screen. Skin oils are difficult to remove.
- Never remove the rear cover. Your LCD TV contains high-voltage parts. You may be seriously injured if you touch them.
- Avoid exposing your LCD TV to direct sunlight or another heat source. Orient your LCD TV away from direct sunlight to reduce glare.
- Always handle your LCD display with care when moving it.
- Place your LCD TV in a well-ventilated area; don't place the LCD TV in airtight compartments. Do not place anything on your LCD TV that prevents heat dissipation.
- Ensure that the area around the LCD TV is clean and free of moisture.
- Do not place heavy objects on the LCD TV, video cable, or power cord.
- If the LCD TV emits smoke, abnormal noise, or a strange odor, immediately turn it off and contact the Westinghouse Service Center.
- WARNING To Reduce The Risk Of Fire Or Electric Shock, Do Not Expose The LCD TV To Rain Or Moisture! The LCD TV shall not be exposed to dripping or splashing and objects filled with liquids, such as vases, shall not be placed on the TV.

Antenna Installation Safety

Outdoor Antenna Grounding

If an outside antenna or cable system is connected to the LCD TV, be sure the antenna or cable system is grounded to prevent voltage surges and built-up static charges. Article 810 of the National Electrical Code, ANS/NFPA 70, provides information on proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

Lightning

For added protection for the LCD TV during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the LCD TV due to lightning and power-line surges. Do not disconnect the antenna or the power cord during a heavy storm – lightning may strike while you are holding the cable cord, causing serious injury. Turn off your LCD TV and wait for the weather to improve.

Power Lines

An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits.

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use the LCD TV near water.
- 6) Clean only with a dry cloth.
- 7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9) Do not attempt to bypass the safety purpose of the polarized or grounding- type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. If the provided plug does not fit into your wall outlet, consult an electrician for replacement of the obsolete outlet.
- 10) Protect the power cord from being walked on or pinched particularly at the ends of the cord.
- 11) Only use attachments/accessories specified by the manufacturer.
- 12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the LCD TV. When a cart is used, use caution when moving the cart to avoid injury or damage.



- 13) Unplug the LCD TV during lightning storms or when it is not being used for a long period of time.
- 14) Refer all servicing to qualified service personnel. Servicing is required when the LCD TV has been damaged in any way, such as the power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the LCD TV, it has been exposed to rain or moisture, it does not operate normally, or the TV has been dropped.

Safety Guidelines

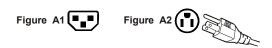
WARNING: This device must be operated with the original power supply, part number ADP-60CF A.

CAUTION: The power supply outlet should be located near LCD TV and should be easily accessible. Always use the appropriate AC cord that is certified for your specific country. Some examples are listed below:

USA.....UL Canada.....CSA Germany.....VDE Switzerland SEV Britain BASE/BS Japan Electric Appliance Control Act

IMPORTANT NOTICE CONCERNING POWER CORD SELECTION

The specific power cord for this LCD TV is enclosed and has been selected according to the country of destination and must be used to prevent electric shock. Use the following guidelines if it is necessary to replace the original cord set, or if the cord set is not enclosed. The female receptacle of the cord set must meet IEC-60320 requirements and should look like Figure A1 below:



For the United States and Canada

In the United States and Canada the male plug is a NEMA5-15 style (Figure A2), UL Listed, and CSA Labeled. For LCD TVs that are placed on a desk or table, type SVT or SJT cord sets may be used. For LCD TVs placed directly on the floor, only SJT type cord sets may be used. The cord set must be selected according to the current rating for the LCD TV. Please consult the table below for the selection criteria for power cords used in the United States and Canada.

Cord Type	Size of Conductors in Cord	Maximum Current Rating of Unit
SJT	18 AWG	10 Amps
	16 AWG	12 Amps
	14 AWG	12 Amps
SVT	18 AWG	10 Amps
	17 AWG	12 Amps

FCC Compliance Statement

This equipment has been tested and complies with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and may cause harmful interference to radio communications if not installed and used in accordance with the instructions. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the LCD TV and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the Westinghouse Service Center or an experienced radio/TV technician for assistance.

FCC Warning

To assure continued FCC compliance, the user must use a grounded power supply cord and the provided shielded video interface cable with bonded ferrite cores. If a BNC cable used, use only a shielded BNC (5) cable. Also, any unauthorized changes or modifications not expressly approved by Westinghouse Digital will void the user's authority to operate this device.

Cleaning the LCD TV

- MAKE SURE THE LCD TV IS TURNED OFF
- NEVER SPRAY OR POUR ANY LIQUID DIRECTLY ONTO THE SCREEN OR CASE

To clean the screen:

- 1. Wipe the screen with a clean, soft, lint-free cloth. This removes dust and other particles.
- 2. If still not clean, apply a small amount of non-ammonia, non-alcohol based glass cleaner onto a clean, soft, lint-free cloth, and wipe the screen.

To clean the case:

- 1. Use a soft, dry cloth.
- 2. If still not clean, apply a small amount of non-ammonia, non-alcohol based, mild nonabrasive detergent onto a clean, soft, lint-free cloth, then wipe the surface.

Disclaimer

Manufacturer does not recommend the use of any ammonia or alcohol-based cleaners on the LCD TV screen or case. Some chemical cleaners have been reported to damage the screen and or LCD TV case. Manufacturer will not be liable for damage resulting from use of any ammonia or alcohol-based cleaners.

INSTALLATION

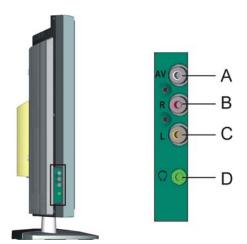
Package Content

Your product package includes:

- 30" LCD TV
- Remote Control (with batteries)
- Power Cord
- Quick Connect Guide
- User's Manual
- Component Video Cable (Green, Red, Blue)
- Audio Cable (Red, White)



Side View of the LCD TV



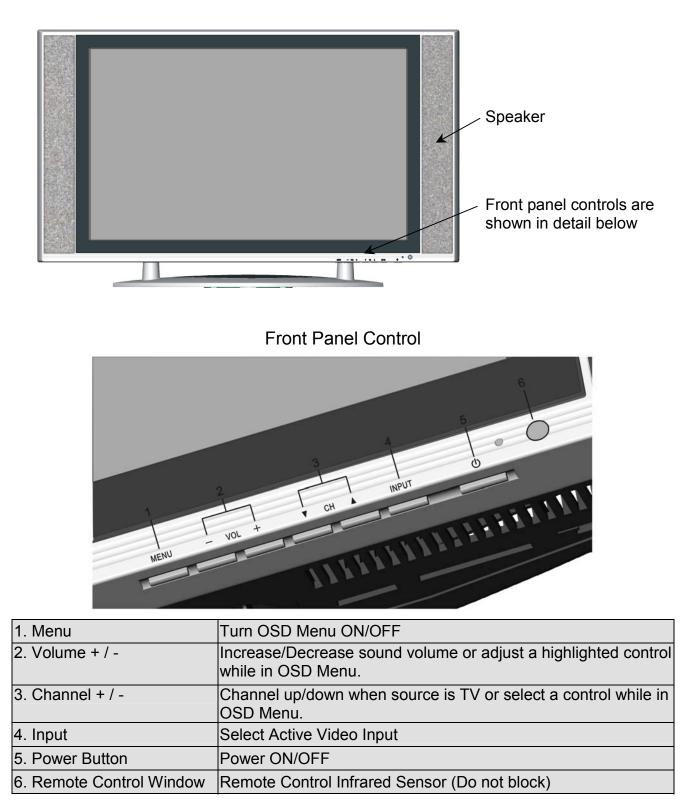
A. AV Video Input

Connect the Composite Video to an external video device such as VCR, DVD or Video Game.

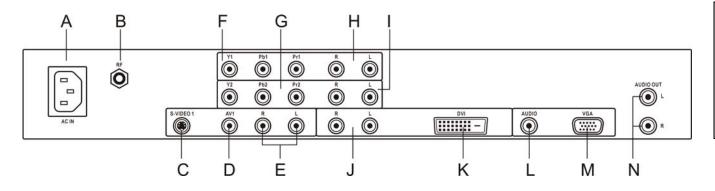
- B/C. Audio Input (Left / Right) Connect an external audio to this jack (Audio (R/L). Inputs support either S-Video or AV input).
- D. Headphone Jack.

Front View of the LCD TV

Use the buttons on the front panel control (or included remote control) to display and adjust the On Screen Display (OSD). The OSD controls are defined in "OSD Functions" on page 14.



Rear View of the LCD TV



English

A. AC IN (Power)

Connect the power cord from AC IN to a power source

B. TV Input (RF-input)

Connect to the antenna or cable service

C. S-Video Input

Connect to an external video device such as VCR, DVD or video game system

D. AV Video Input

Connect the Composite Video to an external video device such as VCR, DVD and video game system.

E. AV Audio Input (Right / Left)

Connect an external audio source to this jack; (Audio (R/L). Inputs support either S-Video or AV input.

F. YPbPr1 Input

Connect an external video devices with component output to these jacks.

H. YPbPr1 Audio 1 Input (Right / Left) Connect an external audio to this jack.

G. YPbPr2 Input

Connect an external video devices with component output to these jacks.

I. YPbPr2 Audio 2 Input (Right / Left)

Connect an external audio to this jack.

- J. DVI Audio Input (Right / Left) Connect an external audio to this jack.
- K. DVI

Using the 20-pin DVI connecting to DVI Out

L. RGB Audio IN

Using the cable provided, connect to the Audio out (Green) on your PC.

M. RGB IN

Using a 15-pin VGA cable, connect to the other devices with RGB Out.

N. Audio Output (Right / Left)

Connect an external audio source to this output.

7

English

Remote Control

The Remote Control will transmit to the LCD TV up to 23 feet away.

1. POWER:

Switch the power On/Off

- 2. INPUT
 - Select input source
- 3. CHANNEL NUMBER KEYS Select specific channels
- 4. LAST CH Switch to previous channel
- 5. MENU/EXIT Turn OSD Menu On/Off
- SCALING Select Video Display format "STANDARD", "FILL", or "ZOOM".
- 7. ▼/▲/◀/► OSD MENU control

8. Enter Execute a command

9. MUTE/EXIT

Turn the Sound On/Off

10.INFO

Display the source and channel information

11.PIP

Display Sub picture On/Off

12. FREEZE

- Freeze main screen
- 13.VOL -/+ Volume Up/Down adjustment
- 14.CH -/+

TV Channel Up/Down adjustment

15. YPbPr

Select YPbPr1 / YPbPr2 source input **16.PC**

Select VGA / DVI source input

17.TV

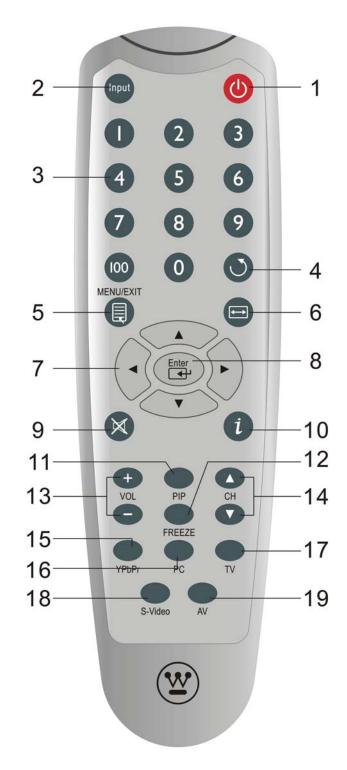
Select TV source input

18.S-Video

Select S-Video source input

19.AV

Select AV1 / AV2 source input



Installation

1. Insert Remote Control Batteries

- 1) Remove the battery cover.
- 2) Insert the batteries corresponding to the (+) and (-) marks on the battery compartment.



3) Re-attach the battery cover.

CAUTION:

- Only use AAA batteries.
- Do not mix new and old batteries. This may result in cracking or leakage, which may pose a fire
 risk or lead to personal injury.
- Insert batteries according to (+) and (-) markings. Inserting the batteries incorrectly may result in cracking or leakage, which may pose a fire risk or lead to personal injury.
- Dispose of used batteries in accordance with local laws and regulations.
- Keep batteries away from children and pets.
- When the remote control will not to be used for an extended period, remove the batteries.

English

2. Connect audio and video cables to a PC

Connect one or all of the following into the back of the LCD TV

IMPORTANT: Before beginning, make sure all devices are turned off.

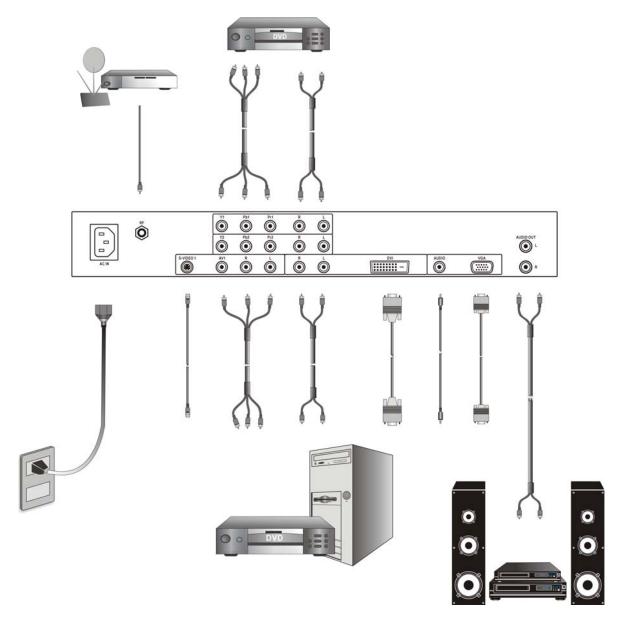
RGB CONNECTION: Connect an analog VGA cable from your PC VGA OUT port to the LCD TV RGB IN port.

DVI CONNECTION: Connect a Digital DVI cable from your PC or DVD DVI OUT port to the LCD TV DVI HDCP port.

AUDIO CONNECTION: Connect a stereo mini cable from the PC's AUDIO OUT port to the AUDIO IN port on the LCD TV.

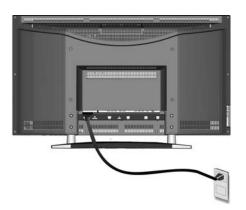
3. Connect AV, Component, S-Video, Antenna/Cable to Video Devices

Connect Video/Audio cables from compatible devices to the back panel of the LCD TV.



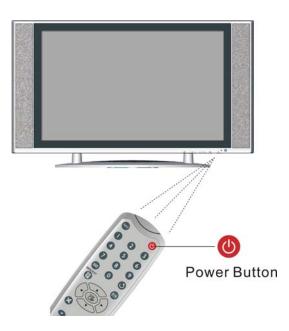
4. Connect power cables

Connect the power cord to the LCD TV then to a properly grounded AC outlet.



5. Turn Power On

Press the Power ON button on the front of the LCD TV, or press the Power ON (Red) button on the remote control.



- 6. Select input source for LCD TV using the OSD menu or remote control
- **7. If connecting to Antenna, Cable or other RF source on TV Inputs:** See page 17 to configure and allow the LCD TV to receive all available channels.

8. If connecting to a PC (RGB/DVI):

For the best picture quality, set LCD TV timing mode to VESA 1280x768 at 60Hz (refer to the graphic card's user guide for questions on how to set this timing mode).

OSD Function

All the function settings for the LCD TV are controlled either by the remote control or using the bottom control keys on the front panel.

To display the OSD main menu, press the Menu button on the front control keys of the LCD TV or the MENU key on the remote control. Use 4/4 arrow keys to highlight the desired OSD sub-menu.



To select a sub-menu, press \blacktriangle/∇ on the front control keys or the \blacktriangle/∇ key on the remote control.

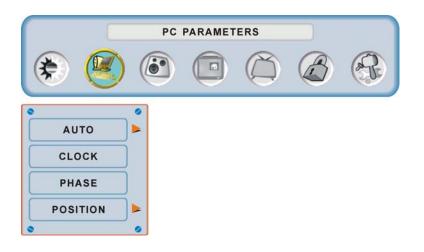


PICTURE PARAMETERS:



Function Name	Function
Brightness	Brightness adjustment
Contrast	Contrast adjustment
Saturation	Saturation adjustment
Hue	Hue adjustment
Color Temp	Color temperature adjustment (Color 1, Color 2, Color 3)
Sharpness	Sharpness adjustment (Sharpness cannot be adjusted in PC mode)
Aspect Ratio	Set Display to "STANDARD" / "FILL" / "ZOOM"
Backlight	Backlight adjustment
Reset	Reset video settings

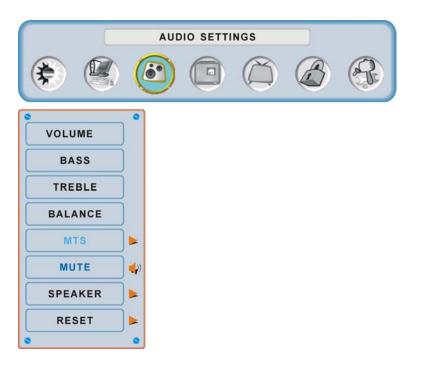
PC PARAMETERS:



Function Name	Function
Auto Adjust	Automatically adjust the horizontal phase of the image
Clock	Clock adjustment
Phase	Phase adjustment
Position	Adjust the horizontal and vertical position of the image

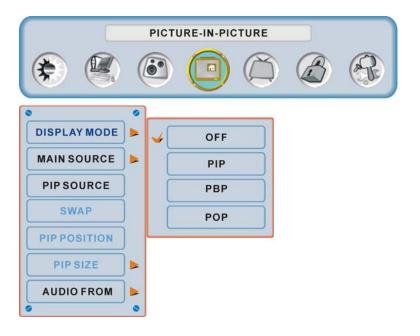
NOTE: The GRAPHIC menu is only available when RGB source is selected.

AUDIO SETTINGS:



Function Name	Function
Volume	Volume adjustment
Bass	Bass adjustment
Treble	Treble adjustment
Balance	Balance adjustment
MTS	MTS Selection NOTE: This function depends on the type of broadcast being received.
Mute	Select Audio OFF or ON
Speaker	Select internal or external speaker
Reset	Reset Audio settings

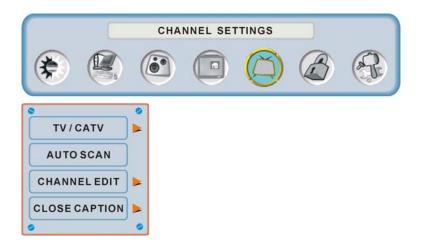
MULTI SCREEN:



Function Name	Function
Display Mode	OFF> PIP> PBP> POP
Main Source	Select main screen sources TV> AV1> AV2> S-Video 1>YPbPr1> YPbPr2> VGA > DVI
PIP Source	Select sub screen sources Please see PIP/POP specification in Table 1
Swap	Swap main and sub source
PIP Position	Sub-screen display H/V Position adjustment
PIP Size	Sub-screen display size adjustment (Small>Medium> Large)
Audio From	Select main screen or sub-screen audio sources

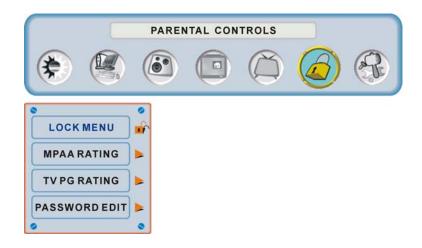
Table 1:

SUB Main	D-SUB	DVI	AV1	AV2	S-Video 1	YPbPr1	YPbPr2	NTSC Tuner
D-SUB	Х	0	0	0	0	Х	0	0
DVI	0	Х	0	0	0	0	0	0
AV1	0	0	Х	Х	Х	0	Х	Х
AV2	0	0	Х	Х	Х	0	Х	Х
S-Video	0	0	Х	Х	Х	0	Х	Х
YPbPr1	Х	0	0	0	0	Х	0	0
YPbPr2	0	0	Х	Х	Х	0	Х	Х
NTSC Tuner	0	0	Х	Х	Х	0	Х	Х

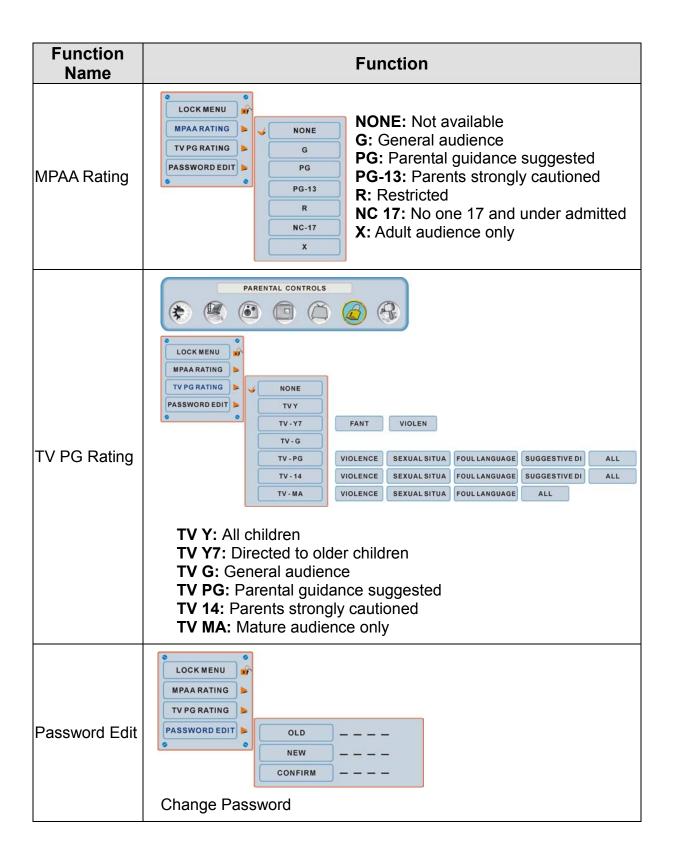


Function Name	Function
	Select TV Source Type (AIR => Cable STD => Cable HRC => Cable IRC)
Auto Scan	Automatically detect available TV channels
Channel EDIT	Add / Delete the selected TV channel
Caption Mode	Turn the Close Caption OFF or CC1, CC2, CC3, CC4, TT1, TT2, TT3, TT4

PARENTAL CONTROLS:

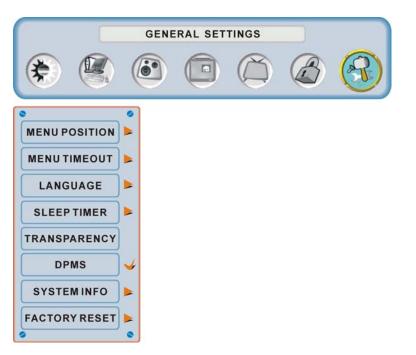


Function Name	Function
Lock Menu	Parental control OFF or ON
MPAA Rating	See page 18
TV PG Rating	See page 18
Password EDIT	Change Password (see page 18)



English

GENERAL SETTINGS:



Function Name	Function
Menu Position	OSD horizontal/vertical position adjustment
Menu Timeout	Set time to turn OFF the OSD
Language	OSD language
Sleep Timer	Set sleep timer
Transparency	Set OSD transparency level
DPMS	Select DPMS On/Off
System Info	Display Input source, type and signal
Factory Reset	Restore factory default settings

Specifications

Panel	Туре	30" (29.53" viewable diagonal area), TFT (Thin Film Transistor), Active Matrix WXGA LCD, 1280*768 vertical stripe
	Color	Anti-reflective coating + Anti-glare coating
Viewing Angles		170° (H) / 170° (V)
Input Signal	Video/Audio	RGB Analog * 1 (75 ohms, 0.7 Vp-p)/Mini-Stereo *1
		H/V separated (TTL) for PC
		DVI-D * 1 (HDCP support) / RCA (L/R) * 1
		fh: 30-80 kHz, fv: 50-75 Hz
		TV system antenna / NSTC *1 in US and TW
		Component Video * 2 / RCA (L/R) Stereo * 2
		Composite * 1 / S–Video * 1 / RCA (L/R) stereo * 1
		Composite * 1 / RCA (L/R) Stereo * 1, Headphone Mini-Stereo *1(side I/P
Output Signal		RCA (L/R) Stereo * 1
HDTV Compatibility		480i, 480P, 720P, 1080i
PC Compatible	Supported	1280 x 1024 @ 60Hz
		1280 x 768 @ 60 Hz
		1024 x 768 @ 60, 75 Hz
		800 x 600 @ 60, 75 Hz
		640 x 480 @ 60, 75 Hz
		720 x 400 @ 70 Hz
	Recommended	1280 x 768 @ 60Hz
Speaker Output		9W (x2 Channels)
Power	Voltage	100-240 VAC, 50/60 Hz (auto switch), 0.8A/1.8A
Operating Conditions	Temperature	0° C to + 35° C (32° F to + 95° F)
	Humidity	10% to 90% (no condensation)
	Altitude	To 3,000 m
Storage Conditions	Temperature	-20° C to + 60° C (-4° F to + 140° F)
	Humidity	10% to 90% (no condensation)
	Altitude	To 12,000m
Dimensions	Physical	860 mm (W) x 524 mm (H) x 203 mm (D)
Weight	Net / Gross	33.1 lb (15.0kgs) / 44.1 lb (20.0kgs)
Regulations		FCC-B, UL/c-UL
	•	180W (Blue LED)
Power saving	On	

English

permanent damage to the LCD TV. **Note:** Product Specifications are subject to change without notice.

Troubleshooting

No Power

- Make sure power button is ON (Blue LED).
- Make sure AC power cord is securely connected to the AC socket.
- Plug another electrical device (such as a radio) to the power outlet to verify that the outlet is supplying the proper voltage.

Parental Control Password is "LOST"

• In the unlikely occurrence, select "PASSWORD EDIT" and enter "0000" to reset the password.

AUDIO Interconnection Issues

• Remember that S-Video 1 and Composite share the same audio source.

Power is ON but No Screen Image

- Make sure the video cable connected to the LCD TV is tightly secured to the video output port on the back of the computer. If the other end of the video cable is not attached permanently to the LCD TV, secure it tightly.
- Adjust brightness and contrast.
- If you are using a Macintosh computer older than G3, you need a Macintosh adapter.
- Check Source settings.

Wrong or Abnormal Colors

- If any colors (red, green, or blue) are missing, check the video cable to make sure it is connected securely. Loose or broken pins in the cable connector could cause an improper connection.
- Connect the LCD TV to another computer.

Remote Control Buttons Do Not Work

• Press only one button at a time.

Snow Appears on Screen

- Check your antenna connection.
- Check the TV / CATV selection.

No Sound

- Check the audio connection.
- Press MUTE on the remote control, so that MUTE disappears from the screen.
- Check the audio settings. The LCD TV audio may be set to SAP or minimum.
- Press the Volume + (Up) key on the remote control.
- Make sure that headphones are not connected to the Headphone Jack on the LCD TV.
- Make sure the speaker setting is set to "internal".

Remote Control Does Not Work

- Make sure batteries are inserted correctly.
- Replace batteries with new ones if necessary.

Remote Control Code Not Found in a "Universal" Remote

• Purchase a separate "learning" remote control.

Image Quality Issues

• For the best TV image quality, "Standard Definition" TV should be viewed in 4:3 format.

How Can I Find More Help?

- Log on to: www.westinghousedigital.com
- Contact Westinghouse Customer Service at (866) 287-5555 or write us at service@westinghousedigital.com



Westinghouse Digital Electronics City of Industry, CA

www.westinghousedigital.com

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